

METHOD AND APPARATUS FOR PRODUCING ALIGNED CARBON NANOTUBE
THERMAL INTERFACE STRUCTURE

ABSTRACT OF THE INVENTION

The invention relates to a method and apparatus for producing aligned carbon nanotube thermal interface structures using batch and continuous manufacturing processes. In a batch process a capacitor is immersed in a bath containing a slurry of thermoplastic polymer containing randomly oriented carbon nanotubes and energized to create an electrical field to orient the carbon nanotubes prior to curing. In a continuous process, slurry carried by a conveyor receives the nanotube aligning electric field from capacitors positioned on both sides of the conveyor bearing the slurry.

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